

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently amended) A micro-dispenser for dispensing a predetermined amount of fluids under the control of a controller comprising:

a base, having a plurality of holes, electrically connected to the controller; and

an array of tube assemblies, filled with predetermined fluids, detachably disposed in the holes and separately electrically connected to the base, the tube assemblies dispensing the fluids under the control of the controller, wherein the tube assemblies are replaceable;

wherein each of the tube assemblies further comprises:

a receptacle having a passage;

a capillary tube, for retaining the fluid, disposed in the receptacle at one end of the passage; and

a print chip head, disposed in the receptacle at the other end of the passage, communicating with the capillary tube.

2. (Currently amended) The micro-dispenser as claimed in claim 1, wherein the base is provided with at least one recess formed adjacent to each hole, and the receptacle of each of the tube assemblies is provided with at least one protrusion corresponding to the at least one recess for engaging with the base.

3. (Currently amended) ~~The micro-dispenser as claimed in claim 2,~~ A micro-dispenser for dispensing a predetermined amount of fluids under the control of a controller comprising:

a base, having a plurality of holes, electrically connected to the controller, wherein the base is provided with a at least one first pad disposed in each of the holes separately; and

an array of tube assemblies, filled with predetermined fluids, detachably disposed in the holes and separately electrically connected to the base, the tube assemblies dispensing the fluids under the control of the controller, wherein the tube assemblies are replaceable;

wherein each of the tube assemblies further comprises:

a receptacle having a passage, and each of the tube assemblies wherein the receptacle is provided with at least one second pad corresponding to the at least one first pad, wherein and the second pads abut the first pads when the tube assemblies are inserted into the holes of the base;

a capillary tube, for retaining the fluid, disposed in the receptacle at one end of the passage; and

a print chip head, disposed in the receptacle at the other end of the passage, communicating with the capillary tube.

4. (Currently amended) The micro-dispenser as claimed in claim 3, A micro-dispenser for dispensing a predetermined amount of fluids under the control of a controller comprising:

a base, having a plurality of holes, electrically connected to the controller, wherein the base is provided with at least one concave portion and at least one first pad disposed in each of the holes separately; and

an array of tube assemblies, filled with predetermined fluids, detachably disposed in the holes and separately electrically connected to the base, the tube assemblies dispensing the fluids under the control of the controller, wherein the tube assemblies are replaceable;

wherein each of the tube assemblies further comprises:

a receptacle, having a passage, provided with at least one protrusion corresponding to the at least one recess for engaging with the base, the protrusions formed thereon and wherein the receptacle is provided with at least one second pad corresponding to the at least one first pad, and the second pads abut the first pads when the tube assemblies are inserted into the holes of the base the second pads disposed therein, having a passage;

a capillary tube, for retaining the fluid, disposed in the receptacle at one end of the passage; and

a print chip head, disposed in the receptacle at the other end of the passage, abutting the second pads and communicating with the capillary tube.

5. (Original) The micro-dispenser as claimed in claim 1, wherein each of the tube assemblies is marked with a code indicating the type of fluid contained therein.

6. (Original) The micro-dispenser as claimed in claim 1, wherein the base is provided with a first detecting device for detecting the amount of the fluid.

7. (Original) The micro-dispenser as claimed in claim 1, wherein each of the tube assemblies is provided with a second detecting device for detecting the amount of fluid remaining therein.

8. (Original) The micro-dispenser as claimed in claim 1, wherein the tube assembly is pulse pressure ink-jet type.

9. (Original) The micro-dispenser as claimed in claim 1, wherein the tube assembly is bubble jet ink-jet type.

10. (Original) The micro-dispenser as claimed in claim 1, wherein the tube assembly is slit jet ink-jet type.

11. (Currently amended) A dispensing device for a biochemical analysis comprising:
a controller; and

at least one micro-dispenser, for dispensing a predetermined amount of reagents to a substrate used in the biochemical analysis, electrically connected to the controller, wherein the micro-dispenser comprises:

a base, having a plurality of holes, electrically connected to the controller; and

an array of tube assemblies, filled with predetermined reagents, detachably disposed in the holes and separately electrically connected to the base, the tube assemblies dispensing the reagents under the control of the controller when the base faces the substrate, wherein the tube assemblies are replaceable;

wherein each of the tube assemblies further comprises:
a receptacle having a passage;
a capillary tube, for retaining the fluid, disposed in the receptacle at one end of the
passage; and
a print chip head, disposed in the receptacle at the other end of the passage,
communicating with the capillary tube.

12. (Currently amended) The dispensing device as claimed in claim 11, wherein the base is provided with at least one recess formed adjacent to each hole, and the receptacle of each of the tube assemblies is provided with at least one protrusion corresponding to the at least one recess for engaging with the base.

13. (Currently amended) ~~The dispensing device as claimed in claim 12,~~ A dispensing device for a biochemical analysis comprising:

a controller; and
at least one micro-dispenser, for dispensing a predetermined amount of reagents to a
substrate used in the biochemical analysis, electrically connected to the controller, wherein the
micro-dispenser comprises:

a base, having a plurality of holes, electrically connected to the controller, wherein the
base is provided with at least one first pad disposed in each of the holes separately; and

an array of tube assemblies, filled with predetermined fluids, detachably disposed in the
holes and separately electrically connected to the base, the tube assemblies dispensing the fluids
under the control of the controller, wherein the tube assemblies are replaceable;

wherein each of the tube assemblies further comprises:

a receptacle having a passage, and each of the tube assemblies wherein the receptacle is
provided with at least one second pad corresponding to the at least one first pad, whereby and the
second pads abut the first pads when the tube assemblies are inserted into the holes of the base;

a capillary tube, for retaining the fluid, disposed in the receptacle at one end of the
passage; and

a print chip head, disposed in the receptacle at the other end of the passage, communicating with the capillary tube.

14. (Currently amended) ~~The dispensing device as claimed in claim 13,~~ A dispensing device for a biochemical analysis comprising:

a controller; and

at least one micro-dispenser, for dispensing a predetermined amount of reagents to a substrate used in the biochemical analysis, electrically connected to the controller, wherein the micro-dispenser comprises:

a base, having a plurality of holes, electrically connected to the controller, wherein the base is provided with at least one concave portion and at least one first pad disposed in each of the holes separately; and

an array of tube assemblies, filled with predetermined fluids, detachably disposed in the holes and separately electrically connected to the base, the tube assemblies dispensing the fluids under the control of the controller, wherein the tube assemblies are replaceable;

wherein each of the tube assemblies further comprises:

a receptacle, having a passage, provided with at least one protrusion corresponding to the at least one recess for engaging with the base, the protrusions formed thereon and wherein the receptacle is provided with at least one second pad corresponding to the at least one first pad, and the second pads abut the first pads when the tube assemblies are inserted into the holes of the base the second pads disposed therein, having a passage;

a capillary tube, for retaining the reagent, disposed in the receptacle at one end of the passage; and

a print chip head, disposed in the receptacle at the other end of the passage, abutting the second pads and communicating with the capillary tube.

15. (Original) The dispensing device as claimed in claim 11, wherein each of the tube assemblies is marked with a code for indicating the type of reagent contained therein.

16. (Original) The dispensing device as claimed in claim 11, wherein the base is provided with a first detecting device for detecting the amount of the reagent.

17. (Original) The dispensing device as claimed in claim 11, wherein each of the tube assemblies is provided with a second detecting device for detecting the amount of the reagent contained therein.

18. (Original) The dispensing device as claimed in claim 11, wherein the micro-dispenser is pulse pressure ink-jet type.

19. (Original) The dispensing device as claimed in claim 11, wherein the micro-dispenser is bubble jet ink-jet type.

20. (Original) The dispensing device as claimed in claim 11, wherein the micro-dispenser is slit jet ink-jet type.